

The following data matrices contain the data field changes for NPDMS Year 2000:

ND-TABLE spread sheet - ND-TABLE FILE

Interpreting the seven (7) columns of the spread sheet:

1. Field Name
2. Field Length prior to changes (length stored on database)
3. Field Length after changes (proposed length stored on database)
4. Date format prior to changes (format stored on database) dealing only with portion of the field that is a date.
5. Date format after changes (proposed format stored on database) dealing only with portion of the field that is a date.
6. Type of change made to database:
 - a) c = Convert data (actual length has not changed but the contents of the database field is being converted. Usually involves removing slashes and dashes).
 - b) e = Expand Field (the two (2) digit year portion of the field has been expanded to four (4) digits).
7. Header contains the file name and the 'D' values contained reflects that the field is a descriptor on the file.

The NPDMS team's analysis revealed that nearly all of the date fields are year 2000 compliant on the database. Unfortunately these fields are currently being hard coded with '19' in the programs. NPDMS input screens and all other process screens where a date field is modifiable are being changed to input the full 4 character century. Most of the screens are formatted with three fields on the screen separated by hard coded slashes. We have changed these input to reflect three fields separated with a space. The Year portion will be 4 characters long requiring the entry of the full century. All non-modifiable date files on the screen will not be changed and will not display the whole century, these fields will be considered cosmetic changes. All of the reports will not be changed and display the date files in their current format.

The NPDMS team's analysis has identified multiple document numbers that are used that are structured with an embedded julian date that does not have the century or decade. These are not specific year 2000 problems but are performance design problems with the NPDMS system not being decade compliant. The correct way to handle these document numbers is still being evaluated. We need to determine which of the following methods best serves the agency; derive the dates, expand the dates, reevaluate descriptor and super

descriptors, or create accept/reject logic to assure proper functionality. We will release this specific information on November 15, 1997.

Further analysis by the NPDMS team revealed that the document numbers will not need to be changed until October 1999. One thing that was determined was that there must be an archiving system in place or NPDMS will not function correctly. The best solution that the NPDMS team found was to change the year field to an 'A' for 7 (1997), a 'B' for 8 (1998), and a 'C' for 9 (1999) on October 1, 1999. (This is assuming that the archive process will keep records that are 2 years old or less.) This will allow the SORTs to work in the correct order. When archiving, the letters would be switched back to the respective year.

Please address your questions to Jim Crowell or Neal Cantrell at the following addresses.

jim.crowell@msfc.nasa.gov or 205-544-8408
neal.cantrell@msfc.nasa.gov or 205-544-8394